

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claim 8 is pending. By the present response, claim 8 has been amended. Thus, upon entry of the present response, claim 8 remains pending and awaits further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: original claim 8.

OBJECTIONS TO THE SPECIFICATION

The abstract and the title stand objected to on the grounds set forth in paragraphs 2-3 of the official action. By the present response, the abstract and the title have been amended in a manner which is believed to address these objections. Thus, reconsideration and withdrawal of these objections is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claim 8 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim subject matter in regards to the invention on the grounds set forth in paragraph 4 of the Official Action.

More specifically, claim 8 stands rejected on the grounds that the term "substoichiometric" is vague and confusing. This rejection is respectfully traversed. The

term "substoichiometric" is used frequently by those in the art, and its meaning is readily apparent on its face. In order to illustrate the point, a search was performed of U.S. patents issuing since 1976 which contain the word "substoichiometric." This search resulted in a list of 1,399 patents which contained the term (see Attachment A). Thus, reconsideration and withdrawal of the rejection is respectfully requested.

Claim 8 also stands rejected on the grounds that the term "finely" which appears in the phrase "a finely distributed" does not comply with the requirements of 35 U.S.C. §112, second paragraph. This assertion is respectfully traversed. It is submitted that the meaning of the phrase "the finely distributed" is readily apparent to those of ordinary skill in the art, and is readily visible from the photomicrographs contained in the present application. However, in order to advance prosecution, Applicants have amended claim 8 in a manner which removes this limitation from the requirements of the claim. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claim 8 stands rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,447,912 to Mikus et al. (hereafter "*Mikus et al.*") on the grounds set forth in paragraph 5 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

Mikus et al. does not constitute prior art.

The present application has an earlier U.S. filing date than *Mikus et al.*, and was constructively reduced to practice (e.g. - as of the foreign priority date) prior to any known

publication associated with *Mikus et al.* Thus, *Mikus et al* does not qualify as prior art against the present application. The rejection is incorrect as a matter of law and should be withdrawn.

DOUBLE PATENTING REJECTION

Claim 8 stands rejected under the judicially created doctrine of obviousness type double patenting over claims 15 through 24 of *Mikus et al.* This rejection is respectfully traversed.

The only distinction between claim 8 of the present application and claims 15 through 24 of *Mikus et al.* that is acknowledged in the grounds for rejection is the use of diamond to coat a cemented carbide body (recited in claim 15 of *Mikus et al.*). However, there are numerous additional distinctions between the presently claimed invention and the invention claimed by *Mikus et al.* that are not mentioned, much less an explanation given as to how these distinctions would have been obvious to one of ordinary skill in the art. Thus the rejection clearly fails to establish a *prima facie* case of obviousness-type double patenting.

The following table illustrates the numerous differences in the claimed subject matter that the grounds for rejection fails to address.

Claim 8

A method of making a coated cemented carbide body,

the body comprising a cemented carbide of WC with an average grain size of 0.5-4 μm , 3.5-9 wt-% Co and <2 wt-% carbides of Ta, Ti and Nb and with a substoichiometric carbon content,

the method comprising: sintering the body such that an eta phase containing structure is obtained with a size of 1-15 μm and a content of 10 vol-% to 35 vol-%, and

subjecting the cemented carbide body to recarburisation such that the eta phase in a 50-350 μm wide intermediate zone is transformed to WC+Co without essentially changing its Co-content.

Claim 15 of U.S. Patent 6,447,912

A method for producing a diamond coated cemented carbide body with a surface zone in the cemented carbide being different from the rest of the carbide body

the method comprising:
decarburizing the body to form an eta phase containing surface zone 3-100 μm thick and comprising >60% by volume of at least partially interconnected eta phase and

recarburizing the body whereby the eta phase is completely transformed into WC+Co.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 

Scott W. Cummings
Registration No. 41,567

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: March 31, 2003



Application No. 09/973,819
Attorney's Docket No. 024444-976
Page 1

Attachment to Amendment dated March 31, 2003

Marked-up Copy

Page 1, the first sentence:

This application is a divisional of Application No. 09/547,339, filed on April 11,
2000, now U.S. Patent No. 6,344,265.

RECEIVED
APR 02 2003
TC 1700

Attachement of the Amendment dated March 31, 2003

Marked-up Claim 8

8. (Amended) A method of making a coated cemented carbide body, the body comprising a cemented carbide of WC with an average grain size of 0.5-4 μm , 3.5-9 wt-% Co and <2 wt-% carbides of Ta, Ti and Nb and with a substoichiometric carbon content, the method comprising: sintering the body such that an eta phase containing structure is obtained [in which the eta phase is finely distributed] with a size of 1-15 μm and a content of 10 vol-% to 35 vol-%, and subjecting the cemented carbide body to [a gentle] recarburisation such that the eta phase in a 50-350 μm wide intermediate zone is transformed to WC+Co without essentially changing its Co-content.